

### **AMENDMENTS TO THE CLAIMS**

The listing of claims will replace all prior versions, and listings, of claims in the application.

#### **Listing of Claims**

1. (Currently Amended) A data management method for managing original data, first derivative data which is generated through editing processing on the original data, and second derivative data which is generated through editing processing on the first derivative data, by relating the original data, the first derivative data, and the second derivative data, the data management method comprising the steps of:

generating first link information for linking the original data and the first derivative data and first editing information representing the content of the editing processing on the original data;

attaching the first link information and the first editing information to the original data ~~and the first derivative data~~ as first accompanying information thereof;

generating first reverse link information for linking the first derivative data and the original data and the first editing information representing the content of the editing processing on the original data;

attaching the first reverse link information and the first editing information to the first derivative data as second accompanying information thereof;

generating second link information for linking the first derivative data and the second derivative data and second editing information representing the content of the editing processing on the first derivative data; ~~and~~

attaching the second link information and the second editing information to the first derivative data ~~and the second derivative data~~ as ~~second~~ third accompanying information thereof;

generating second reverse link information for linking the second derivative data and the first derivative data and second editing information representing the content of the editing processing on the first derivative data; and

attaching the second reverse link information and the second editing information to the second derivative data as fourth accompanying information thereof.

2. (Currently Amended) A data management apparatus for managing original data, first derivative data which is generated through editing processing on the original data, and second derivative data which is generated through editing processing on the first derivative data, by relating the original data, the first derivative data, and the second derivative data, the data management apparatus comprising:

a storage unit;

a processing unit; and

a file management unit having a program directing carrying out the steps of:

~~first link information generation means for~~ generating first link information for linking the original data and the first derivative data and first editing information representing the content of the editing processing on the original data;

~~first information attaching means for attaching the first link information and the first editing information to the original data and the first derivative data as first accompanying information;~~

generating first reverse link information for linking the first derivative data and the original data and the first editing information representing the content of the editing processing on the original data;

attaching the first reverse link information and the first editing information to the first derivative data as second accompanying information thereof;

~~second link information generation means generating second link information for linking the first derivative data and the second derivative data and second editing information representing the content of the editing processing on the first derivative data; and~~

~~second information attaching means for attaching the second link information and the second editing information to the first derivative data and the second derivative data as second third accompanying information thereof;~~

generating second reverse link information for linking the second derivative data and the first derivative data and second editing information representing the content of the editing processing on the first derivative data; and

attaching the second reverse link information and the second editing information to the second derivative data as fourth accompanying information thereof.

Claim 3. (Cancelled).

4. (Currently Amended) A computer readable recording medium storing thereon a program for causing a computer to execute steps of managing original data, first derivative data which is generated through editing processing on the original data, and second derivative data which is generated through editing processing on the first derivative data, by relating the original data, the first derivative data, and the second derivative data, the program comprising the steps of:

generating first link information for linking the original data and the first derivative data and first editing information representing the content of the editing processing on the original data;

attaching the first link information and the first editing information to the original data ~~and the first derivative data~~ as first accompanying information thereof;

generating first reverse link information for linking the first derivative data and the original data and the first editing information representing the content of the editing processing on the original data;

attaching the first reverse link information and the first editing information to the first derivative data as second accompanying information thereof;

generating second link information for linking the first derivative data and the second derivative data and second editing information representing the content of the editing processing on the first derivative data; ~~and~~

attaching the second link information and the second editing information to the first derivative data ~~and the second derivative data~~ as ~~second~~ third accompanying information thereof;

generating second reverse link information for linking the second derivative data and the first derivative data and second editing information representing the content of the editing processing on the first derivative data; and

attaching the second reverse link information and the second editing information to the second derivative data as fourth accompanying information thereof.

5. (Currently Amended) The data management method, as defined in Claim 1, wherein the first accompanying information is inseparably attached to ~~each of the original data; and the first derivative data; and~~

the second and third accompanying information ~~is~~ are inseparably attached to ~~each of the first derivative data and the second derivative data; and~~

the fourth accompanying information is inseparably attached to the second derivative data.

6. (Previously Presented) The data management method, as defined in Claim 1, wherein the editing processing includes at least one of:

copying to generate the first derivative data that have exactly the same content as the original data;

copying to generate the second derivative data that have exactly the same content as the first derivative data;

processing to obtain the first derivative data by modifying the original data;

processing to obtain the second derivative data by modifying the first derivative data;

image processing on the original data to generate the first derivative data in the case where the original data are image data; and

image processing on the first derivative data to generate the second derivative data in the case where the first derivative data are image data.

7. (Previously Presented) The data management method, as defined in Claim 6, wherein the copying to generate the first derivative data includes not only a process for sending the original data from a computer having the original data to another computer, but also a process for sending the first derivative data from a computer having the first derivative data to another computer.

8. (Previously Presented) The data management method, as defined in Claim 7, wherein the computer having the original data is connected to the other computer to which the original data is sent through one of a network and a serial connection and the computer having the first derivative data is connected to the other computer to which the first derivative data is sent through one of the network and the serial connection.

9. (Previously Presented) The data management method, as defined in Claim 8, wherein the network includes one of a LAN and a WAN such as the Internet.

10. (Currently Amended) The data management method, as defined in Claim 1, wherein

the first link information is information that enables a user to directly or indirectly refer to the original data from the first derivative data and the first reverse link information is information that allows a user to directly or indirectly refer to the first derivative data from the original data, and

the second link information is information that enables a user to directly or indirectly refer to the first derivative data from the second derivative data and the second reverse link information is information that allows a user to directly or indirectly refer to the second derivative data from the first derivative data.

11. (Currently Amended) The data management method, as defined in Claim 10, wherein

the first link information attached to the original data includes the name of the first derivative data, and wherein the first link information attached to the original data further includes at least one of a location of the first derivative data and a pointer indicating the location thereof;

the first reverse link information attached to the first derivative data includes the name of the original data, and wherein the first reverse link information attached to the first derivative data further includes at least one of a location of the original data and a pointer indicating the location thereof;

the second link information attached to the first derivative data includes the name of the second derivative data, and wherein the second link information attached to the first derivative

data further includes at least one of a location of the second derivative data and a pointer indicating the location thereof; and

the second reverse link information attached to the second derivative data includes the name of the ~~first~~second derivative data, and wherein the second reverse link information attached to the second derivative data further includes at least one of a location of the ~~first~~ second derivative data and a pointer indicating the location thereof.

12. (Previously Presented) The data management method, as defined in Claim 11, wherein the pointer is the URL of:

the original data in the case where the original data are stored in a Web server;

the first derivative data in the case where the first derivative data are stored in a Web server; and

the second derivative data in the case where the second derivative data are stored in a Web server.

13. (Currently Amended) The data management method, as defined in Claim 1, wherein the first accompanying information is attached to ~~each of the original data and the first derivative data~~ by using one of a method of describing the first accompanying information in the header information in ~~each of the original data and the first derivative data~~, a method of describing the first accompanying information in tag information of ~~each of the original data and the first derivative data~~ if the original data and the first derivative data are image data, and a



method of writing the first accompanying information generated according to XML in a predetermined area of ~~each of the original data and the first derivative data~~, and

~~the second accompanying information is attached to each of the first derivative data and the second derivative data by using one of a method of describing the second accompanying information in the header information of each of the first derivative data and the second derivative data, a method of describing the second accompanying information in the tag information of each of the first derivative data and the second derivative data if the original data and first derivative data and the second derivative data are image data, and a method of writing the second accompanying information generated according to XML in a predetermined area of each of the first derivative data and the second derivative data;~~

the third accompanying information is attached to the first derivative data by using one of a method of describing the third accompanying information in the header information of the first derivative data, a method of describing the third accompanying information in tag information the first derivative data if the first derivative data and second derivative data are image data, and a method of writing the third accompanying information generated according to XML in a predetermined area of the first derivative data; and

the fourth accompanying information is attached to the second derivative data by using one of a method of describing the fourth accompanying information in the header information of the second derivative data, a method of describing the fourth accompanying information in tag information of the second derivative data if the first derivative data and second derivative data are image data, and a method of writing the fourth accompanying information generated according to XML in a predetermined area of the second derivative data.

Claim 14. (Cancelled).

15. (Previously Presented) The data management method, as defined in Claim 1, further comprising the steps of:

generating third link information for linking the original data and said second derivative data and third editing information representing the content of the editing processing to generate said second derivative data from the original data, and

attaching the third link information and the third editing information to the original data and said second derivative data as third accompanying information thereof.

Claim 16. (Cancelled).

17. (Previously Presented) A data management method for managing original data and derivative data by relating the original data and the derivative data, the derivative data being generated through editing processing on the original data, the data management method comprising the steps of:

generating link information for linking the original data and the derivative data and editing information representing the content of the editing processing; and

attaching the link information and the editing information to the original data and the derivative data as accompanying information thereof, wherein

the link information attached to the original data represents the location of the derivative data, and

the link information attached to the derivative data represents the location of the original data.

18. (New) A data management method for managing original data, first derivative data which is generated through editing processing on the original data, and second derivative data which is generated through editing processing on the first derivative data, by relating the original data, the first derivative data, and the second derivative data, the data management method comprising the steps of:

generating first link information for linking the original data and the first derivative data and first editing information representing the content of the editing processing on the original data;

attaching the first link information and the first editing information to the original data as first accompanying information thereof;

generating first reverse link information for linking the first derivative data and the original and the first editing information representing the content of the editing processing on the original data;

attaching the first reverse link information and the first editing information to the first derivative data as second accompanying information thereof.